Daily Schedule

8:00-8:15 Arrival & Check-in

8:15-9:45 Instructional Session I

9:45-10:00 Break with Snack

10:00-11:30 Instructional Session 2

11:30-12:30 Lunch (provided)

12:30-2:00 Instructional Session 1

2:00-2:15 Break with Snack

2:15-3:45 Instructional Session 2

3:45-4:00 Dismissal & Check-out

EKU Faculty and Staff Participants

Dr. Lindsay Calderon
Dr. Dorie Combs
Dr. David Cunningham
Dr. Victoria Eastman
Ms. Vickie Moberly
Dr. Susan Neumann
Dr. Jaleh Rezaie
Dr. Darrin Smith
Dr. Ryan Sharp
Dr. Scott Townsend
Dr. Bill Staddon
Dr. Rebekah Waikel
Dr. Lori Wilson
Dr. Kwan Yi

Registration (Deadline May 9, 2014)
Tuition: $145.00 (Includes snacks, lunch, and t-shirt)

Student Name: _____

Address: _____

Telephone: _____

E-mail: _____

Parent/Guardian: _____

Emergency Contact Name and Telephone: _____

County: _____ Grade in fall 2014: _____

Ethnicity: _____ Gender: _____

Signature and Title of Person verifying this student is identified as gifted: _____

7th Annual Soar to New Heights: A STEM-ulating Escapade!

June 16-20, 2014
8:00 a.m.—4:00 p.m.

A camp experience for Gifted and Talented students entering grades 6-8, Fall 2014

Eastern Kentucky University
New Science Building
Presented by EKU College of Education & STEM-H Institute

For Further Information Contact:
EKU College of Education
Curriculum & Instruction-Gifted and Talented
859-622-2154
Debra.sparks@eku.edu

Course Offerings

Courses are divided between morning and afternoon sessions. All courses have a class size limit of participants. Students should indicate their top three choices in each session (Please mark 1, 2, 3 in spaces provided, with 1 indicating first choice).

Morning Course Offerings

Plague, Disease & Death (Stephanie Adams, Angela Christ) _____
"Superheroes ain't got nothing on us." Saving the world is for scientists, not just superheroes. Using examples from the past and present, join us as we explore how disease takes hold, spreads and threatens humanity. Learn effective ways to control disease, and create plans to save the world from some of the most sinister foes around: those we can't see. **Class size limit: 16**

Did you hear that? (Debbie Hale) _____
Have you ever seen a cartoon, movie or commercial where an opera singer is belting out a great tune and then the window shatters? Did you think 'How did that happen?'? In this course, learn how different sounds are developed and how sounds become 'pitches'. Get involved in many different activities illustrating how sound waves move and the science involved in sound. Turn those sounds into music and enjoy the soothing, yet sometimes peppy 'sounds' of the day! **Class size limit: 10**

Being the Best You Can Be (Stacey Jefferson and Monnie Berger)_____
Do you want to be healthy and have fun while doing it? Well, this is the class for you. You will learn how to take care of your body by participating in fun fitness routines and learning what foods are best for growing teens. You will discover different healthy habits specific to your body. So let's get up and start moving! **Class size limit: 15**

Energy is Electrifying! (Kelly Lovell)_____
Learn about different ways energy can be generated. You'll conduct experiments and other hands-on tasks to explore electricity systems. The systems you'll study will include solar, wind, hydro, fossil fuel, and geothermal. There will also be a culminating construction activity to further your knowledge of energy efficiency. Don't be shocked by what you will learn!!!! **Class size limit: 15**

CSI: Crime Scene Investigators! (Dr. David Cunningham)_____
Have you ever wanted to know what it would be like to solve a crime? Use science based inquiry to investigate crimes and find physical evidence! Be part of the detective team by using the same tools that police officers use to find and lift fingerprints. Become a forensic scientist running the instruments used in crime laboratories to test for drugs and poisons. Can you figure out "who did it"? **Class size limit: 15**

Engineers Save the Day! (Dr. Scott Townsend) _____
Engineers do more than just build things and do math. They think and solve problems in very organized and disciplined ways. Come try your hand at engineering challenges that will push your limits in design, creation, and creativity. **Class size limit: 15**

Afternoon Course Offerings

Termite Races (Dr. Staddon) _____
Termites will follow a blue line drawn with some brands of pen (Bic® etc.). Let's investigate this phenomena. You will be challenged to determine which ink pattern termites follow most quickly. You will explore and compare parallel lines, thick lines or lines drawn with several brands of pens. Several trials for each line pattern will be calculated. You will then form groups and compete to determine pattern is best. **Class size limit: 12**

Deciphering Your Blood! (James Mills, Dr. Calderon & Dr. Waikel)_____
Your blood holds clues as to who you are. This course explores the unique features of red blood cells, called antigens, which determine whether you have A, B, AB, or O blood type, as well as the DNA sequences, genes, in your genome that determine these blood types. In fact, you will determine your own blood type without a drop of blood. You will extract your own DNA from your loose cheek cells (spit) and perform bench-top research techniques to analysis your DNA. Additionally, our course will aid students in planning their futures by examining various careers in the healthcare fields. Discussions/activities involving education, job opportunities, roles, needs/data, salaries, etc. will be included. Join us for this exciting and fast paced hands-on lab experience to learn about your blood and future career options. **Class size limit: 12**

Fun with Physics! (Robbie Riley, Deborah Druen)_____
In this course, you will be involved in a variety of activities to demonstrate how physics is used in the world today. Newton's Laws of Motion and other physics concepts will be explored during the course. You will be calculating the speed and acceleration of objects and experience how those objects will react with other forces (gravity, friction, etc.). You will be demonstrating how Newton's Law and Physics concepts are applied in the world today, such as: roller coasters, rockets, etc. **Class size limit: 20**

Race around the World! (Katrina Sexton) _____
Are you curious about far off places and people? What was life like thousands of years ago compared to now? Do you like to explore and be adventurous? Come discover new places and learn about new cultures. Take a "virtual" trip through history. Want to learn HOW? The first to the finish line will find the answers along the way, but you have to enter the race to play. Are you ready to line up at the starting point? **Class size limit: 12**

Exploring Nature with Technology (Susan Neumann) _____
Are you fascinated by what you see and hear outdoors? Come and explore nature through a variety of technologies including iPods, GPS, digital cameras, and LabQuest sensors. **Class size limit: 12**

If Mother Nature Could Take a Selfie: An Examination of How All Things are Connected (Dr. Ryan Sharp) _____
We will venture out to Taylor Fork Ecological Area next to the EKU campus and uncover how even the smallest changes to an ecosystem can have large impacts. We will cover issues related to water, land use, invasive/exotic species and how to be good stewards of the land. **Class size limit: 15**